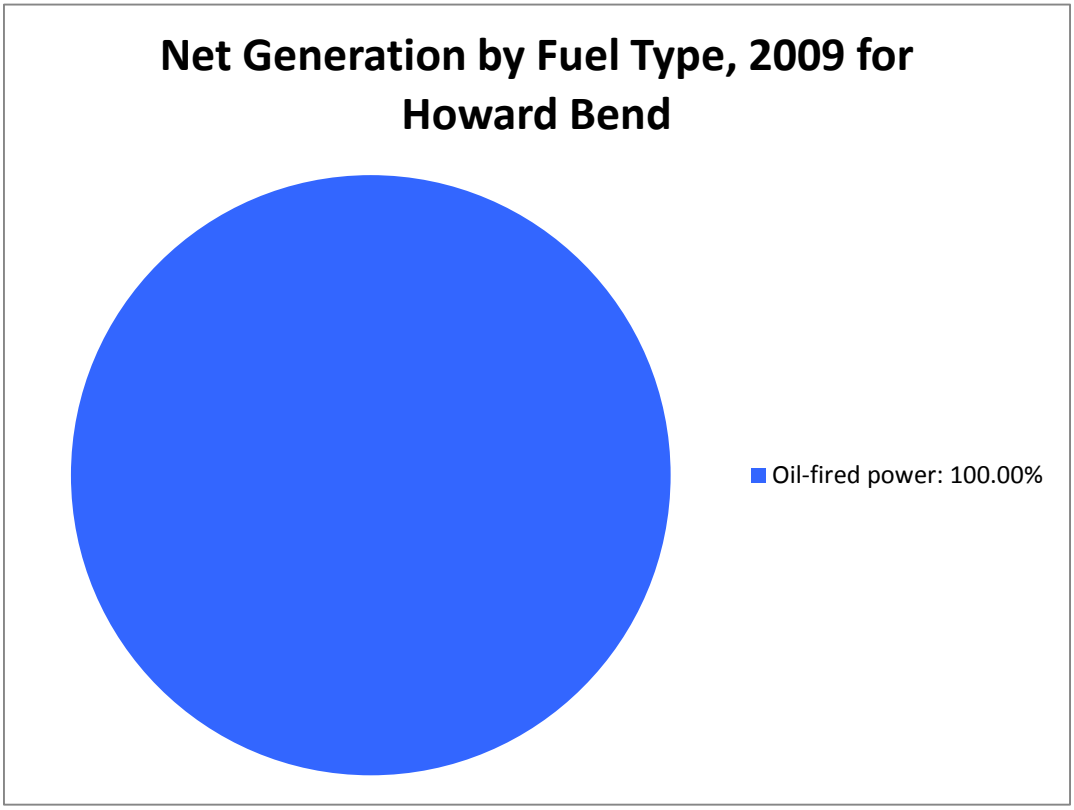
Missouri Department of Natural Resources

Power Plant: Howard Bend
Plant Owner: Union Electric Company
Power generated in 2009 from non-renewable and renewable sources

	Fuel Consumption, MMBTUs	Percent of Total		Net Electric Power Generated in 2009 (MWh)	Percent of Total	
Non-renewable sources						
Coal-fired power						
Natural gas-fired power						
Oil-fired power	3,495	100.00%		145	100.00%	
Nuclear power						
Other non-renewable power						
Non-renewable total	**3,495**	**100.00%**	**100.00%**	**145**	**100.00%**	**100.00%**
Renewable sources						
Hydroelectric Power						
Wind						
Waste and biomass						
Solar						
Geothermal						
Landfill Gas						
Renewable total	**0**	**0.00%**	**0.00%**	**0**	**0.00%**	**0.00%**
Grand total all sources	**3,495**		**100.00%**	**145**		**100.00%**

Fuel Type	Physical Units	Number of Units
Distillate Fuel Oil	Barrels	607


Net Generation by Fuel Type, 2009 for Howard Bend
Oil-fired power: 100.00%

Missouri Department of Natural Resources

Howard Bend
Emissions from Electricity Generated in 2009

Plant	Carbon Dioxide(CO2) (Tons)	Carbon Monoxide(CO) (Tons)	Ammonia (NH3) (Tons)	Nitrogen Oxides (NOx) (Tons)	Sulfur Dioxides (SO2) (Tons)
Howard Bend	48.98	0.12	NV	1.68	2.44

Plant	Volatile Organic Compounds (VOC) (Tons)	Course Particulate Matter (PM10) (Tons)	Fine Particulate Matter (PM2.5) (Tons)	Mercury (Hg) (LBS)
Howard Bend	0.04	0.09	NV	NV

'NV' = Emissions value not available.

Missouri Department of Natural Resources

Pollution controls installed on Howard Bend

SO2 Controls			
Plant	Control Equipment	Sorbent Type	Operational Efficiency
Howard Bend	No SO2 Controls Installed		

NOX Controls				
Plant	Device Type	Description	Capture Efficiency	Control Efficiency
Howard Bend	No NOX Controls Installed			

Data Sources

• Emissions Data: Missouri Department of Natural Resources, Air Pollution Control Program, Missouri Emissions Inventory System (MOEIS) http://www.dnr.mo.gov/env/apcp/moeis/emissionsreporting.htm

• CO2 Emissions calculated by Missouri Department of Natural Resources, Division of Energy, from EIA Fuel Consumption Data

• Fuel Consumption and Generation Data: United States Energy Information Administration, Form 923, United States Department of Energy http://www.eia.gov/cneaf/electricity/page/eia906_920.html